UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,630	03/26/2001	Michael T. Frantzen	P5374 US	6885

24726　　7590　　07/27/2004	EXAMINER
SUN MICROSYSTEMS INC	PHAN, TAM T

SUN MICROSYSTEMS INC
4120 NETWORK CIRCLE
MS USCA12-203
SANTA CLARA, CA 95054

ART UNIT	PAPER NUMBER
2144	4

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/817,630	FRANTZEN ET AL.	
	Examiner	**Art Unit**	
	Tam (Jenny) Phan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 July 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-36_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-36_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _26 March 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This application has been examined. Claims 1-36 are presented for examination.

Priority

2.   No priority claims have been made.

3.   The effective filing date for the subject matter defined in the pending claims in this

application is 03/26/2001.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

5.   Claims 1, 10, 19 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by

Applicant Admitted Prior Art (AARP).

6.   Regarding claim 1, AARP disclosed a method for managing a network connection in a

network configuration comprising a firewall, said method comprising: automatically determining

whether said network connection is active; and deleting a state of said network connection if said

network connection is not active (Background, page 3 paragraphs !0004-!0005).

7.   Regarding claim 10, the computer readable medium embodying a program for managing

a network connection corresponds directly to the method of claim 1, and thus is rejected using

the same rationale.

8.   Regarding claim 19, the computer system corresponds directly to the method of claim 1,

and thus is rejected using the same rationale.

9.   Regarding claim 28, the computer system corresponds directly to the method of claim 1

and thus is rejected using the same rationale.

10.   Since all the limitations of the claimed invention were disclosed by AARP, claims 1, 10,

19 and 28 are rejected.

11.   Claims 1-8, 10-17, 19-26, and 28-35 are rejected under 35 U.S.C. 102(e) as being

anticipated by Fan et al. (U.S. Patent Number 6,219,706), hereinafter referred to as Fan.

12.   Regarding claim 1, Fan disclosed a method for managing a network connection in a

network configuration comprising a firewall, said method comprising: automatically determining

whether said network connection is active; and deleting a state of said network connection if said

network connection is not active (Figure 1, Figure 5 signs 502-506, column 10 lines 10-26,

column 12 lines 10-25).

13.   Regarding claim 2, Fan disclosed a method wherein said automatically determining

whether said network connection is active comprises: generating a probe, said probe causing a

network activity corresponding to said network connection; and sensing said network activity to

determine whether said network connection is active (Abstract, Figure 5, column 2 lines 27-41,

column 7 lines 20-41, column 8 lines 37-48).

14.   Regarding claim 3, Fan disclosed a method wherein said firewall comprises a database

for storing information relating a state of said network connection and wherein, in response to

said network activity, said firewall updates information stored in said database (Figures 9-10C,

column 4 lines 1-7, column 7 lines 20-40, lines 52-61).

15.   Regarding claim 4, Fan disclosed a method wherein said stored information comprises an

idle time counter of said network connection and wherein said firewall resets said time counter if

said network connection is determined to be active (column 12 lines 10-25).

16.   Regarding claim 5, Fan disclosed a method wherein said network connection is between a

client and a server and said probe comprises a packet containing probe data, and wherein said

probe data is a copy of first data, said first data having been sent by the server and received and

acknowledged by said client during preceding communication between said client and said

server (column 10 lines 52-67).

17.   Regarding claim 6, Fan disclosed a method wherein said network activity comprises a

response from said client indicating a condition of said network connection (column 8 lines 37-

48, column 10 lines 10-26).

18.   Regarding claim 7, Fan disclosed a method wherein said response of said client

comprises a data receipt acknowledgment if said network connection is active and an error

message if said network connection is not active (column 8 lines 38-48, column 10 lines 10-26).

19.   Regarding claim 8, Fan disclosed a method wherein said probe is nondestructive [audit

trail] with respect to said network connection (column 10 lines 10-26).

20.   Regarding claims 10-17, the computer readable medium embodying a program for

managing a network connection corresponds directly to the method of claims 1-8, and thus these

claims are rejected using the same rationale.

21.   Regarding claims 19-26, the computer system corresponds directly to the method of

claims 1-8, and thus these claims are rejected using the same rationale.

22.   Regarding claims 28-35, the computer system corresponds directly to the method of

claims 1-8, and thus these claims are rejected using the same rationale.

23.   Since all the limitations of the claimed invention were disclosed by Fan, claims 1-8, 10-

17, 19-26, and 28-35 are rejected.

Claim Rejections - 35 USC § 103

24.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

25.   Claims 9, 18, 27, and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Fan

et al. (U.S. Patent Number 6,219,706, hereinafter referred to as Fan, in view of Gadish (U.S.

Patent Number 6,202,087).

26.   Regarding claim 9, Fan disclosed a method for managing a network connection in a

network configuration comprising a firewall, said method comprising: automatically determining

whether said network connection is active; and deleting a state of said network connection if said

network connection is not active (Figure 1, Figure 5 signs 502-506, column 10 lines 10-26,

column 12 lines 10-25). Fan further disclosed a method wherein said automatically determining

whether said network connection is active comprises: generating a probe, said probe causing a

network activity corresponding to said network connection; and sensing said network activity to

determine whether said network connection is active (Abstract, Figure 5, column 2 lines 27-41,

column 7 lines 20-41, column 8 lines 37-48).

27.   Fan taught the invention substantially as claimed. However, Fan did not expressly teach method wherein said probe is generated by said firewall.

28.   Fan suggested exploration of art and/or provided a reason to modify the method with probe being generated at the firewall (Figures 1, 10A, column 1 lines 12-18).

29.   Gadish disclosed method wherein said probe [message] is generated by said firewall (column 2 lines 34-35, column 4 lines 56-61).

30.   It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Fan with the teachings of Gadish to include probe being generated at the firewall in order to allow the firewall to inquire about network activity and to offload resource from the web server to the firewall server (column 2 lines 29-65) since probe messages might be generated by a firewall in place of a server (column 2 lines 29-35).

31.   Regarding claim 18, the computer readable medium embodying a program for managing a network connection corresponds directly to the method of claims 9, and thus is rejected using the same rationale.

32.   Regarding claim 27, the computer system corresponds directly to the method of claim 9, and thus is rejected using the same rationale.

33.   Regarding claim 36, the computer system corresponds directly to the method of claim 9, and thus is rejected using the same rationale.

34.   Since all the limitations of the claimed invention were disclosed by the combination of Fan and Gadish, claims 9, 18, 27, and 36 are rejected.

Conclusion

35.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

    a.   Arutyunov (U.S. Patent Number 6,611,868) disclosed methods and systems

pertaining to automatically and locally terminating network connection by determining

the state of the connection. In accordance with an exemplary embodiment of the present

invention, the Cable Modem (CM) monitors the network interface for incoming data

transmission activity. If the CM determines or detects no incoming data transmission

activity, the CM begins to query, poll, test the reachability of, or attempt to determine the

status of the connected client. A query is a status request or an attempt to determine the

status of one or more devices. The CM queries, polls, or tests the client in order to detect

an indication of data activity, or transmit status, or usage, or reachability, as applicable. If

no activity from the client is detected or sensed for a predetermined time period, the CM

terminates the network connection.

    b.   Devarakonda et al. (U.S. Patent Number 6,424,992) disclosed a system for routing

and load balancing in an encapsulated cluster of server nodes. The system consists of a

multi-node server wherein clients have affinity to one or more of the server nodes that are

preferred to handle a client request. Such affinity is due to state at the servers either due

to previous routing requests, or data affinity at the server. At the multi-node server, a

node may be designated as a TCP router. The address of the TCP router is given out to

clients, and client requests are sent thereto. The TCP router selects one of the nodes in the

multi-node server to process the client request, and routes the request to this server. The

TCP router maintains affinity tables indicating which node a client was routed to. In

processing the client request and may reset the corresponding TCP router affinity table

entry. The server nodes may also create, modify or delete affinity records in the TCP

router affinity table.

c.   Howes et al. (U.S. Patent Number 6,366,558) disclosed a system for maintaining

the state of a virtual connection supported by an active connection manager on a standby

connection manager. The method includes configuring the standby connection manager

to include a physical machine object that stores a physical IP address of a physical

machine that is available to the active connection manager and a virtual machine object

that stores a virtual IP address of a virtual machine that is implemented on the connection

manager. When connections are established or torn down, a replication packet is sent

from an active connection manager to a failover connection manager. The replication

packet includes information about the connection and the failover connection manager

stores that information. When the failover connection manager determines that the active

connection manager has failed, the failover connection manager becomes active. Since

the failover connection manager already has the information necessary to support all of

the connections formerly handled by the failed connection manager, it is possible the

failover connection manager can immediately begin to handle the connections without

requiring each connection to be dropped and then reestablished.

36.   Refer to the enclosed PTO-892 for details and complete listing of other pertinent prior art

of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William Cuchlinski
SPE
Art Unit 2144
703-308-3873

tp
July 20, 2004

WILLIAM A. CUCHLINSKI, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600